

REMARKS

Claims 1-9 are pending in this application. Claims 1 and 7 have been amended in this response. No new matter has been introduced as a result of the amendments. Support for the amendments may be found in the amended specification, for example, on page 3, lines 19-30, and page 5, lines 14-25

Claims 1-4, 6 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by *Budnik* (US Patent 6,043,707). Claims 5, 8 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Budnik* (US Patent 6,043,707). Applicant traverses these rejections. Favorable reconsideration is respectfully requested.

Applicants maintain the arguments submitted in the previous responses. Specifically, *Budnik* fails to disclose “compensating for any nonlinearity of the transmission amplifier via a predistortion unit for data values in an input data stream, wherein the supply voltage is reduced to an extent to which a quality of predistortion factors for the compensation for the nonlinearity of the transmission amplifier is increased by the predistortion unit, and wherein the quality of predistortion factors are independent of envelope amplitudes present in the amplifier” as recited in claim 1, and similarly recited in claim 7.

The transmission amplifier disclosed in *Budnik* only operates in a non-linear mode only when high power input signals are detected. The digital predistortion in *Budnik* is disclosed as changing between low and intermediate envelope amplitudes on one side and high envelope amplitudes on the other side (see FIG. 6 and associated text). The power amplifier operates in a non-linear mode for high envelope amplitudes, and the power amplifier transmits to an envelope tracking mode at intermediate envelope amplitudes and at low envelope amplitudes, a linear behavior of the power amplifier is obtained (col. 5, lines 35-48). In order to accomplish the transitions of operation modes for the power amplifier an envelope tracking circuit is used.

The envelope tracking circuit of *Budnik* determines whether input signals of the power amplifier are having low, intermediate or high envelope amplitudes. Depending on the detected envelope, one of the three operation modes of the power amplifier is chosen (see col. 4). However, a linear operation of the power amplifier only takes place if low envelope amplitudes

are present. Regarding the Office Actions analysis noting that a "considerable change in operating parameters occur," these "changes" are actually the envelope tracking circuit determining the signal amplitudes to be low signal amplitudes. In fact, this is the triggering feature for changing the operation mode of the power amplifier to a linear mode (see col. 7, lines 25-38). Furthermore, once the amplifier in *Budnik* is operating in a non-linear mode, the supply voltage is never changed to such an extent that a linear operation mode is achieved.

In contrast, the presently claimed configuration, a linear mode of operation for the power amplifier is completely independent from envelope amplitudes. The envelope amplitudes may be low, intermediate or high – it is only when outside disturbance are introduced that the predistortion circuit is put into a state in which the predistortion factors have to be changed to a greater extend in order to get back to a linear mode. In the case of non-linear operation of the power amplifier in the present application, the supply voltage is, for example, increased if the quality of the predistortion factors is too low. This feature is independent from any signal amplitude level. Accordingly, applicants submit that the rejections under 35 U.S.C. §102(b) and 103(a) are improper and should be withdrawn.

Accordingly, Applicants respectfully submit that the patent application is in condition for allowance and request a Notice of Allowance be issued. The Commissioner is authorized to charge and credit Deposit Account No. 02-1818 for any fees associated with the submission of this Response, including any time extension fees. Please reference docket number 112740-846.

Respectfully submitted,

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